

ABSTRACT OF THE DISCLOSURE

The present invention relates to a cross-linkable or cross-linked rubber composition having improved hysteresis properties in the cross-linked state which is useful for constituting a tire tread, to a process for preparation of such a cross-linkable composition, to a tread of this type and to a tire having reduced rolling resistance.

The rubber composition according to the invention is based on:

- an elastomeric matrix comprising at least one diene elastomer which comprises a carboxylic acid function at one or at each of its two chain ends, and
  - a reinforcing filler comprising a reinforcing inorganic filler,
- wherein said diene elastomer has a molecular weight which is greater than 80,000 g/mol, and it is present in a majority quantity in said elastomeric matrix.